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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,311	07/07/2003	Sidney S. Wong		4315

7590 12/10/2003  
John L. Schmitt  
P.O. Box 656  
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EXAMINER

BUI, HUNG S

ART UNIT	PAPER NUMBER
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2841

DATE MAILED: 12/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/613,311	WONG, SIDNEY S.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hung S Bui	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-15 is/are allowed.
- 6) ☐ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 8-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:  
    1. ☐ Certified copies of the priority documents have been received.  
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey [US 5,107,398] in view of Hatada et al. [US 5,077,601].

Regarding claim 1, Bailey discloses a duct (30) for channeling a flow of cooling air within a computer system comprising: a body (figures 6-8) having spaced apart sidewalls (39, 41) connected by an inner and outer walls (figure 8) to define an interior passageway through the body, a lower section of the body having an enlarged bottom end in the outer wall and a narrow top end formed as the walls of the lower section extend upward while the side walls of the lower section convert inward, and an upper section of the body having a narrow bottom end connecting with the narrow top end of the lower section of the inner wall of the upper section arching inward and the outer wall of the upper section diverging upward so that inner end edge up the walls define an opening (figures 6-8), wherein the duct is placed inside an enclosure (12) of the computer system (10) so that one of the opening of the duct is positioned adjacent to vent opening in a side panel of the enclosure.

Bailey discloses the instant claimed invention except for the air flow being drawn from the enlarge opening toward the small opening over a heatsink.

Hatada et al. disclose a cooling system duct (figure 1) drawing air into an enlarge opening through a heatsink toward a small opening (figures 1, 7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use intake design of Hatada et al. for the duct of Bailey, for the purpose of increasing air flow over the heat sink.

Regarding claim 2, Bailey discloses the centerline of one of the opening being laterally offset from a centerline of the other of the opening of the duct (figure 6).

Regarding claim 3, Bailey discloses the use of V-like shaped trim lines to reduce size of one of the openings.

3. Claims 4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey in view of Hatada et al., as applied to claim 1 above, and further in view of Chen [US 6,215,659].

Regarding claim 4, Bailey in view of Hatada et al. disclose the instant claimed invention except for a retaining clip to secure the duct in place.

Chen discloses an air duct secured within a computer housing (figure 1) by means of at least one retaining clip (46).

Regarding claim 6, Bailey in view of Hatada et al. disclose the instant claimed invention except for the duct including a pair of stop brackets and pair of spaced apart ribs formed as part of the duct walls to secure a fan unit.

Chen discloses the duct including a pair of stop brackets (52) and pair of spaced apart ribs (figure 3) formed as part of the duct walls to secure a fan unit (30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the fan securement design of Chen in Bailey in view of Hatada et al., for the purpose of securing the fan in place in the duct.

Regarding claim 7, Bailey in view of Hatada et al. and Chen disclose the instant claimed invention except for the fan being placed in an upper duct section.

The particular position of the fan in the duct would have been an obvious design consideration based on the air flow pattern intended to be rounded through the duct.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey in view of Hatada et al., as applied to claim 1 above, and further in view of Viallet [US 5,917,698].

Regarding claim 5, Bailey in view of Hatada et al. disclose the instant claimed invention except for a U-shaped flange for securing a strap to retain the duct.

Viallet discloses a duct (figure 3) being secured by a strap (165) mounted within a U-shaped flange.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the strap mounting design of Viallet for the duct of Bailey in view of Hatada et al., for the purpose of securing the duct within the enclosure.

***Allowable Subject Matter***

5. Claims 11-15 are allowed.
6. Claims 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S Bui whose telephone number is (703) 305-8024. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S Martin can be reached on (703) 308-3121. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-4349.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-5115.



DAVID MARTIN  
SUPERVISORY PATENT EXAMINER  
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11/24/03  
HB